IN THE CLAIMS

1. (Currently Amended) A ~~method for disabling and enabling receiver circuitry in a cable modem connected to a headend in a cable modem network, the~~ method comprising:

sending a configuration file to a cable modem, the configuration file including power-saving instructions included in vendor-specific extensions;

receiving a registration message from the cable modem at a head end, the registration message including an indication that the cable modem has power-saving capabilities;

sending an acknowledgement to the cable modem to allow the cable modem to use power-saving capabilities;

transmitting a first unicast SYNCH message with first vendor-specific extensions ~~instructions~~ from the headend to the cable modem to disable the cable modem receiver circuitry for periodic intervals separated by activation windows, wherein the cable modem ignores all broadcast messages after receiving the first unicast SYNCH message;

maintaining at the headend an indication of cable modem receiver circuitry state;

transmitting a second unicast SYNCH message with second vendor-specific extensions ~~instructions~~ from the headend to enable the cable modem receiver circuitry such that the cable modem receives the second unicast SYNCH message during an activation window, wherein the headend is configured to identify the activation window corresponding to the time the cable modem receiver circuitry is enabled prior to transmitting the second unicast SYNCH message during the activation window~~, wherein activation window length is varied based on drift between a cable modem clock and a headend clock~~; and

setting the indication of cable modem receiver circuitry state to enabled.

2. (Canceled)

3. (Currently Amended) The method of claim 1~~2~~, wherein the unicast SYNCH message contains periodic interval and activation window information.

4. (Canceled)

5. (Original) The method of claim 1, wherein the activation window is 100 milliseconds.

6. (Original) The method of claim 1, wherein each periodic interval is 10 seconds.

7. (Original) The method of claim 1, wherein messages the cable modem receives during the periodic interval are ignored.

8. (Original) The method of claim 1, wherein multicast messages the cable modem receives during the activation window are ignored.

9. (Original) The method of claim 1, wherein transmitter circuitry is disabled when receiver circuitry is disabled.

10. (Original) The method of claim 1, wherein no messages are transmitted from the cable modem to the headend during the periodic intervals.

11-22. (Canceled)

23. (Currently Amended) A computer readable medium having computer code embodied therein, ~~embodying computer code that is executed on a processor for disabling and enabling cable modem receiver circuitry connected to a headend in a cable modem network,~~ the computer readable medium comprising:

computer code embodied for sending a configuration file to the cable modem, the configuration file including power-saving instructions included in vendor-specific extensions;

computer code embodied for receiving a registration message from the cable modem, the registration message including an indication that the cable modem has power-saving capabilities;

computer code for sending an acknowledgement to the cable modem to allow the cable modem to use power-saving capabilities;

computer code ~~embodied on a computer readable medium~~ for transmitting a first unicast SYNCH message with first vendor-specific extensions ~~instructions~~ from the headend to the cable modem to disable the cable modem receiver circuitry for periodic intervals separated by activation windows, wherein the cable modem ignores all broadcast messages after receiving the first unicast SYNCH message;

computer code ~~embodied on a computer readable medium~~ for setting an indication of cable modem receiver circuitry state to disabled;

computer code ~~embodied on a computer readable medium~~ for transmitting a second unicast SYNCH message with second vendor-specific extensions ~~instructions to enable the cable modem receiver circuitry from the headend~~ from the headend to enable the cable modem receiver circuitry ~~so~~ such that the cable modem receives the second unicast SYNCH message during an activation window, wherein the headend is configured to identify the activation window corresponding to the time the cable modem receiver circuitry is enabled prior to transmitting the second unicast SYNCH message during the activation window, ~~wherein activation window length is varied based on drift between a cable modem clock and a headend clock~~; and

computer code ~~embodied on a computer readable medium~~ for setting the indication of cable modem receiver circuitry state to enabled.

24. (Canceled)

25. (Canceled)

26. (Previously presented) The computer readable medium of claim 23, wherein the activation window is 100 milliseconds.

27. (Previously presented) The computer readable medium of claim 23, wherein each periodic interval is 10 seconds.

28. (Currently Amended) A headend connected to cable modems in a cable modem network, the cable modems comprising receiver circuitry that can be disabled and enabled, the headend comprising:

transmitter circuitry configured to send a configuration file to the cable modem, the configuration file including power-saving instructions included in vendor-specific extensions, receive a registration message from the cable modem, the registration message including an indication that the cable modem has power-saving capabilities, send an acknowledgement to the cable modem to allow the cable modem to use power-saving capabilities, transmit a first unicast SYNCH message with first vendor-specific extensions instructions from the headend to the cable modem to disable the cable modem receiver circuitry for periodic intervals separated by activation windows, wherein the cable modem ignores all broadcast messages after receiving the first unicast SYNCH message, wherein the transmitter circuitry is further configured to transmit a second unicast SYNCH message with vendor-specific extensions to the cable modem, the vendor-specific extensions directing the cable modem to enable the cable modem receiver circuitry, wherein the second unicast SYNCH message is received during the activation window;

~~transmitter circuitry for transmitting a first message with first instructions from the headend to the cable modem to disable the cable modem receiver circuitry for periodic intervals separated by activation windows and for transmitting a second message with second instructions from the headend to enable the cable modem receiver circuitry such that the cable modem receives the second message during an activation window;~~

memory; and

a processor ~~one or more processors~~ coupled with the memory and the transmitter circuitry, the one or more processor configured to set an indication of cable modem state to disabled to correspond with the receipt of the first unicast SYNCH message by the cable modem and to set the indication of cable modem state to enabled to correspond with receipt of the second unicast SYNCH message by the cable modem during the activation window, wherein the processor is configured to identify the activation window corresponding to the time the cable modem receiver circuitry is enabled prior to transmitting the second message during the

activation window~~, wherein activation window length is varied based on drift between a cable modem clock and a headend clock~~.

29. (Original) The apparatus of claim 28, wherein the first message with first instructions from the headend to disable the cable modem receiver circuitry is a unicast SYNCH message.

30. (Original) The apparatus of claim 29, wherein the unicast SYNCH message contains periodic interval and activation window information.

31. (Original) The apparatus of claim 28, wherein the second message with second instructions to enable the cable modem receiver circuitry is a unicast SYNCH message.

32. (Original) The apparatus of claim 28, wherein the activation window is 100 milliseconds.

33. (Original) The apparatus of claim 28, wherein each periodic interval is 10 seconds.

34. (Original) The apparatus of claim 28, wherein messages the cable modem receives during the periodic interval are ignored.

35. (Original) The apparatus of claim 28, wherein multicast messages the cable modem receives during the activation window are ignored.

36. (Original) The apparatus of claim 28, wherein transmitter circuitry is disabled when receiver circuitry is disabled.

37. (Original) The apparatus of claim 28, wherein no messages are transmitted from the cable modem to the headend during the periodic intervals.

38-63. (Canceled)

64. (New) An apparatus, comprising

means for sending a configuration file to a cable modem, the configuration file including power-saving instructions included in vendor-specific extensions;

means for receiving a registration message from the cable modem at a head end, the registration message including an indication that the cable modem has power-saving capabilities;

means for sending an acknowledgement to the cable modem to allow the cable modem to use power-saving capabilities;

means for transmitting a first unicast SYNCH message with first vendor-specific extensions from the headend to the cable modem to disable the cable modem receiver circuitry for periodic intervals separated by activation windows, wherein the cable modem ignores all broadcast messages after receiving the first unicast SYNCH message;

means for maintaining at the headend an indication of cable modem receiver circuitry state;

means for transmitting a second unicast SYNCH message with second vendor-specific extensions from the headend to enable the cable modem receiver circuitry such that the cable modem receives the second unicast SYNCH message during an activation window, wherein the headend is configured to identify the activation window corresponding to the time the cable modem receiver circuitry is enabled prior to transmitting the second unicast SYNCH message during the activation window; and

means for setting the indication of cable modem receiver circuitry state to enabled.